

REMARKS

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

Claims 1-9 are pending in this application. No claims have been amended or cancelled. Claim 1 is the sole independent claim.

Applicants note with appreciation the Examiner's acknowledgement that certified copies of all priority documents have been received by the U.S.P.T.O. Action, summary at 12.

Information Disclosure Statements

Applicants respectfully request that the Examiner consider the references listed in the Information Disclosure Statement filed on October, 17, 2006.

Rejections under 35 USC § 103

Claims 1-6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishina et al (U.S. 5,503,964) in view of JP10-189541. Applicants respectfully traverse this rejection for the reasons detailed below.

Independent claim recites "an in situ baking step, wherein a silicon substrate having hard to soft photoresist layers is baked for a predetermined period of time under a pressure of 760 Torr while said silicon substrate is placed on a hot plate". Example non-limiting embodiments of this feature are discussed, for example, in FIG. 6 of the instant specification.

Nishina, as relied upon by the Examiner, fails to suggest baking for a predetermined period of time under a pressure of 760 Torr while said silicon substrate is placed on a hot plate as recited in independent claim 1.

In column 6, rows 25-27, Nishima states that a "resist material layer is exposed to an O₂ plasma excited by microwaves in a high temperature atmosphere under 2 to 5 Torr pressure". Thus, Nishima teaches submitting a resist material layer to a pressure of 2 to 5 Torr, not less than

2 to 5 Torr as the Examiner appears to suggest. Therefore, Nishina fails to teach or suggest “an in situ baking step, wherein a silicon substrate having hard to soft photoresist layers is baked for a predetermined period of time under a pressure of 760 Torr while said silicon substrate is placed on a hot plate” as recited in independent claim 1.

The abstract of JP-10189541 teaches obtaining a low-pressure treatment method in which the temperature of a substrate to be plasma-ash-treated is raised up to a treatment start temperature in a short time. Claims 1 and 3 of JP-10189541 recite “treats a substrate under reduced pressure and lower than atmospheric pressure is 10 Torr – 100 Torr. The low-pressure treatment method of JP-10189541 is carried out at 10 Torr – 100 Torr rather than at atmospheric pressure as in independent claim 1. Therefore, JP-10189541 also fails to teach or suggest “an in situ baking step, wherein a silicon substrate having hard to soft photoresist layers is baked for a predetermined period of time under a pressure of 760 Torr while said silicon substrate is placed on a hot plate” as recited in independent claim 1.

Because neither Nishina nor JP-10189541 teaches submitting a layer to a pressure of 760 Torr as recited in independent claim 1, the alleged combination of Nishina and JP-10189541 also cannot teach “an in situ baking step, wherein a silicon substrate having hard to soft photoresist layers is baked for a predetermined period of time under a pressure of 760 Torr while said silicon substrate is placed on a hot plate” as recited in independent claim 1.

The Applicants, therefore, respectfully request that the rejection to Claims 1-6 under 35 U.S.C. § 103(a) be withdrawn.

Claims 2-6, dependent on independent claim 1, are patentable for the reasons stated above with respect to claim 1 as well as for their own merits.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection to independent claim 1 and all claims dependent thereon.

CONCLUSION

In view of the above remarks and amendments, the Applicants respectfully submit that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Erin G. Hoffman, Reg. No. 57,752, at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By

John A. Castellano, Reg. No. 35,094
P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

JAC/EGH:ald